



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER OF PATENTS AND TRADEMARKS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09 879,448	06/12/2001	Robert A. Migliorini	2001B056	3553

23455 7590 05/21/2003

EXXONMOBIL CHEMICAL COMPANY  
P O BOX 2149  
BAYTOWN, TX 77522-2149

EXAMINER

KEEHAN, CHRISTOPHER M

ART UNIT	PAPER NUMBER
----------	--------------

1712

DATE MAILED: 05/21/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/879,448

Applicant(s)

MIGLIORINI ET AL.

Examiner

Christopher M. Keehan

Art Unit

1712

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 17 March 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-53,56-68 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-21,23-25,27-52,56,58 and 60-68 is/are rejected.
- 7) ☐ Claim(s) 22,26,53,57 and 59 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

### Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 14 6) ☐ Other:

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after allowance or after an Office action under *Ex Parte Quayle*, 25 USPQ 74, 453 O.G. 213 (Comm'r Pat. 1935). Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, prosecution in this application has been reopened pursuant to 37 CFR 1.114. Applicant's submission filed on 3/17/03 has been entered.

### ***Examiner's Suggestions***

The following are suggestions by the examiner to create a clearer prosecution record. These suggestions are not objections or rejections, but merely some things that might prove helpful upon consideration by applicant. In claim 11, while it appears evident that applicant is referring to the blend of the first skin layer, it might also be interpreted as applying to the blend in claim 1, as a "blend" has not been defined by applicant. It is suggested to change this claim language to create a clearer prosecution record.

### ***Claim Rejections - 35 USC § 102/103***

Claims 1-10, 12-18, 20, 21, 23-25, 29-45, 48-52, 56, 58, and 60-68 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a)

Art Unit: 1712

as obvious over Peiffer et al. (EP 06656101A1). The examiner is relying on the full translation of this foreign document, attached herewith. Regarding claims 1, 34, and 38, Peiffer et al. disclose a thermoplastic film comprising a core layer comprising a polymerized isotactic polypropylene homopolymer (page 4, paragraphs 5-8), a first transition layer comprising polyolefin (page 8, paragraph 7-page 9, first paragraph) and a silicone additive (page 10, paragraphs 2-5), and a first skin layer comprising polyolefin (page 11, paragraph 7-page 12, paragraph 3), situated in the instantly claimed configuration (page 4, paragraphs 3-4). Although Pfeiffer et al. do not specifically disclose a Ziegler-Natta catalyst polymerized core layer, Pfeiffer et al. do disclose that the core layer has an n-heptane soluble fraction of generally 1-6 wt.% (page 4, paragraph 8). As this falls within the range, as disclosed by applicant in the 37 C.F.R. 1.132 Declaration filed 8/12/02, as being indicative of a polymer that has been polymerized with a Ziegler-Natta catalyst (section 5 of the declaration), it appears this is inherently disclosed by Peiffer et al. If not inherent, then it would have been obvious to one of ordinary skill in the art at the time the invention was made for the polymer of Peiffer et al. to be polymerized from a Ziegler-Natta catalyst because the n-heptane soluble fraction is included in the range indicating polymerization by a Ziegler-Natta catalyst.

Regarding claim 2, Peiffer et al. disclose an exposed surface of the first skin layer subjected to a treatment selected from the group as instantly claimed (page 14, paragraph 2-3).

Art Unit: 1712

Regarding claims 3 and 4, Peiffer et al. disclose a silicone additive as instantly claimed (page 10, paragraph 5).

Regarding claims 5 and 6, Peiffer et al. disclose adding silicone additive to an intermediate layer produces a surprising result of stable and optionally good lubricating properties and optionally good antistatic properties (page 14, paragraph 6). Peiffer et al. also disclose adding an amount of silicone additive that it included in the range claimed by applicant (page 10, paragraphs 2-5). Therefore, it appears that the instantly claimed coefficient of friction is inherently disclosed by Peiffer et al. because the materials of Peiffer et al. and amounts added are the same as applicant's. If not inherent, then it would have been obvious to one of ordinary skill in the art at the time the invention was made to for the film of Peiffer et al. to possess at least similar inherent properties because the materials of Peiffer et al. are at least similar to applicant's, and at least similar materials would have yielded a film with at least similar inherent properties.

Regarding claims 7-9, Peiffer et al. disclose an anti-blocking agent as instantly claimed (page 12, last paragraph-page 13, first paragraph).

Regarding claim 10, Peiffer et al. disclose a layer comprising a polymer selected from the group as instantly claimed (paragraph bridging pages 11 and 12).

Regarding claims 12-15, Peiffer et al. disclose wherein the first skin layer comprises a polymer selected from the group as instantly claimed in the instantly claimed amounts (as set forth above). Although Peiffer et al. do not appear to specifically disclose the process by which they are formed, applicant is reminded "even though product-by-process claims are limited by and defined by the process,

Art Unit: 1712

determination of patentability is based in the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process." *In re Thorpe*, 227 USPQ 964, 966. The film of Peiffer et al. appears to be the same or obvious from the film as instantly claimed.

Regarding claim 16, Peiffer et al. disclose a core layer comprising a polymer selected from the group as instantly claimed (page 4, paragraphs 5-8).

Regarding claim 17, Peiffer et al. disclose a transition layer comprising a polymer selected from the group as instantly claimed (page 8, paragraph 7-page 9, first paragraph).

Regarding claim 18, Peiffer et al. disclose a base thickness that encompasses the instantly claimed amount (page 13, paragraph 3).

Regarding claim 20, Peiffer et al. disclose the instantly claimed thicknesses (page 11, paragraph 6 and page 13, paragraph 2, respectively).

Regarding claims 21 and 23, Peiffer et al. disclose wherein the silicone additive has a viscosity included in the instantly claimed amount (page 10, paragraph 5). It is the examiner's position that greater than *about* 1,000,000 centistokes (claim 21) can be included in the range as disclosed by Peiffer et al. Further, it is noted that centistokes= $\text{mm}^2/\text{s}$ .

Regarding claims 24 and 25, Peiffer et al. disclose the instantly claimed amount (page 10, paragraph 2).

Art Unit: 1712

Regarding claims 29, 30, 60, 61, 63, 66, and 68, Pfeiffer et al. do not appear to disclose the instantly claimed inherent properties. However, as the materials of Pfeiffer et al. are the same as applicant's, it appears this is inherently disclosed because the same materials would have yielded a film with the same inherent properties. If not inherent, then it would have been obvious to one of ordinary skill in the art at the time the invention was made for the film of Pfeiffer et al. to have at least similar inherent properties, such as those instantly claimed, because the materials of Pfeiffer et al. are at least similar to those of applicant's, and at least similar materials would have yielded a film with at least similar inherent properties.

Regarding claims 31-33, Pfeiffer et al. disclose coextruding, cooling, (page 13, paragraphs 4-5), surface treating (page 14, paragraphs 2-3), and orienting the film (page 13, paragraph 6) comprising the instantly claimed components (as set forth above for claim 1).

Regarding claims 35-37, 39-41, and 43-45, Pfeiffer et al. disclose treating the outer layers (skin layers) as instantly claimed (paragraphs 3 and 4), as the film is passed between two conducting elements.

Regarding claim 42, the same reasoning as set forth above for claims 1, 34, and 38 also applies to claim 42, except for the limitation of the second skin layer. Pfeiffer et al. disclose that the outer layer comprises high density polyethylene (page 12, paragraph 4).

Regarding claims 48-50, Pfeiffer et al. disclose an additive selected from the groups as instantly claimed (page 5, last three paragraphs-page 6, first paragraph).

Art Unit: 1712

Regarding claim 51, Peiffer et al. disclose adding polybutylene terephthalate to the core layer with a particle size and amount as instantly claimed (page 8, paragraphs 1-5).

Regarding claims 52, 54, and 56, the same reasoning as set forth above for claims 1, 34, and 38, and 21, also applies to these claims, as the claimed subject matter is essentially the same.

Regarding claims 58 and 67, the same reasoning as set forth above for claims 1, 34, 38, and 42 also applies to claim 42, except for the limitation of the second skin layer. Peiffer et al. disclose that the outer layer comprises high density polyethylene (page 12, paragraph 4).

Regarding claims 62 and 64, the same reasoning as set forth above for claims, 34, 38, 52, 54, 56 also applies to these claims as the claimed subject matter is essentially the same.

Regarding claim 65, Peiffer et al. disclose an exposed surface of the first skin layer subjected to a treatment selected from the group as instantly claimed (page 14, paragraphs 2-3).

### ***Claim Rejections - 35 USC § 103***

Claims 11 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Peiffer et al. (EP 06656101A1). The examiner is relying on the full translation of this foreign document, attached herewith. Peiffer et al., as applied to claim 1 above, are as set forth and incorporated herein. Regarding claim 11, Peiffer et al. disclose a blend



Art Unit: 1712

of ethylene-propylene copolymer and ethylene-propylene-butene-1 terpolymer, and adding these to achieve a specific polymeric content (page 11, bottom half of the page-page 12, first half of the page), thereby identifying these polymers as result-effective variables. Peiffer et al. do not appear to specifically disclose the instantly claimed amounts. However, as applicant's claimed range is so broad, and applicant shows no criticality as to the instantly claimed amounts, it would have been obvious to one of ordinary skill in the art at the time the invention was made for Peiffer et al. to have added a variety of amounts of the instantly claimed polymers, including that as instantly claimed, through routine experimentation and optimization. It has been held that where the general conditions are disclosed in the prior art, it is not inventive to discover the optimum or workable ranges by routine experimentation. *In re Aller*, 105 USPQ 233, 235. A particular parameter must first be recognized as a result-effective variable, i.e., a variable which achieves a recognized result, before the determination of the optimum or workable ranges of said variable might be characterized as routine experimentation. *In re Boesch*, 205 USPQ 215.

Regarding claim 19, Peiffer et al. do not appear to disclose the instantly claimed thickness. However, Peiffer et al. do disclose that the total thickness is governed by the intended use of the film. Therefore, as applicant has shown no criticality as to the instantly claimed thickness, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have varied the thickness of the core layer to a variety of thicknesses, based on the intended use of the film.

Claim 27 is rejected under 35 U.S.C. 103(a) as being unpatentable over Peiffer et al. (EP 06656101A1) in view of Touhsaent (6,013,353). Peiffer et al., as applied above, are as set forth and incorporated herein. Peiffer et al. do not appear to disclose applying a coating to a skin layer from the group as instantly claimed. Touhsaent discloses applying acrylics to a polymer skin layer in a multilayer configuration, and that this is well known in the art (col.5, line 53-col.6, line 33). It would have been obvious to one of ordinary skill in the art at the time the invention was made to have applied the layer of acrylics as taught by Touhsaent to the polymer skin layer of Bader et al. because Touhsaent teaches that applying a layer of acrylics to a polymer skin layer in a multilayer film produces increased adherence of following polymeric layers resulting in a higher quality product.

Claims 28, 46, and 47 are rejected under 35 U.S.C. 103(a) as being unpatentable over Peiffer et al. (EP 06656101A1) in view of Bader et al. (5,972,496). Peiffer et al. do not appear to disclose a metallized layer as instantly claimed. Bader et al. disclose a thermoplastic film comprising a core layer comprising a Ziegler-Natta catalyst-polymerized polypropylene (col.3, lines 6-14) wherein the core layer comprises the interior of the film (Abstract), a first layer comprising a polyolefin and a silicone additive, and a first skin layer comprising the same materials as claimed by applicant (col.3, lines 24-65) that is vacuum metallized (col.6, lines 23-27). It would have been obvious to one of ordinary skill in the art at the time the invention was made for Peiffer et al. to have metallized a layer as taught by Bader et al. because Bader et al. teach

Art Unit: 1712

that metallizing an outer layer in a multilayer film produces low water vapor transmission rate characteristics and low oxygen transmission rate characteristics, resulting in a higher quality and more effective film.

Note: Claims 22, 26, 53, 57, and 59 appear to be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, first paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

#### ***Allowable Subject Matter***

Claims 22, 26, 53, 57, and 59 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. A reasonable search of the prior art of record failed to reveal the limitations as set forth in these claims. Peiffer et al. do not teach or disclose the instantly claimed viscosities.

#### ***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Hatakeyama et al. (5,820,956) disclose a silicone additive in an inner layer, but do not appear to teach or disclose a Ziegler-Natta polymerized core layer as claimed in claims 1, 34, 38, and 42. Also, regarding claims 31 and 60, Hatakeyama et al. do not disclose a surface treatment. Regarding claim 52, Hatakeyama et al. do not appear to disclose a silicone additive as instantly claimed.

Art Unit: 1712

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christopher M. Keehan whose telephone number is (703) 305-2778. The examiner can normally be reached on Monday-Friday, from 6:30 to 3:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert A. Dawson can be reached on 308-2340. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9310 for regular communications and (703) 872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.

Christopher Keehan *C.M.K.*

May 14, 2003

*Robert A. Dawson*

Robert A. Dawson  
Supervisor  
Art Unit 1712  
Tel: (703) 308-2340  
Fax: (703) 308-0661